

### **AMENDMENTS TO THE CLAIMS**

This listing of claims replaces all prior versions, and listings, of claims in the application:

#### **Listing of Claims:**

Claim 1-4. (Cancelled).

Claim 5. (Previously Presented) A communication system comprising the transmission apparatus as claimed in Claim 7, and a reception apparatus for receiving the transmitted signal, wherein:

the reception apparatus comprises:

reception means for receiving the transmitted signal; and

coherent detection means for carrying out coherent detection by using the pilot symbols included in the received signal.

Claim 6. (Previously Presented) The communication system as claimed in claim 5, wherein the signal generation means generates the signal to be transmitted into which the pilot symbols have been inserted, such that accuracy of coherent detection is maintained.

Claim 7. (Previously Presented) A transmission apparatus for transmitting a signal at plural types of transmission rates, comprising:

signal generation means for generating a signal to be transmitted into which pilot symbols which are predetermined patterns have been inserted, such that a ratio of the number of the pilot symbols to the total number of symbols in a single slot of the signal becomes smaller in

a case where a transmission rate of the signal is high, than that in a case where the transmission rate is low; and

transmission means for transmitting the generated signal.

Claim 8. (Previously Presented) The transmission apparatus as claimed in claim 7, wherein the signal generation means generates the signal to be transmitted into which the pilot symbols have been inserted, such accuracy of coherent detection is maintained.

Claim 9. (Previously Presented) A transmission method for transmitting a signal at plural types of transmission rates, comprising:

a signal generation step of generating a signal to be transmitted into which pilot symbols which are predetermined patterns have been inserted, such that a ratio of a number of the pilot symbols to the total number of symbols in a single slot of the signal becomes smaller in a case where a transmission rate of the signal is high, than that in a case where the transmission rate is low; and

a transmission step of transmitting the generated signal.

Claim 10. (Previously Presented) The transmission method as claimed in claim 9, wherein the signal generation step generates the signal to be transmitted into which the pilot symbols have been inserted, such that accuracy of coherent detection is maintained.